

ABSTRACT

In a CCD type solid-state image sensor (CCD) of this invention, a potential gradient is provided in which potentials
5 about electric signals gradually change from a photodiode toward a gate electrode. Specifically, impurities forming the photodiode are diffused in the shape of character "X", and the width of the impurities is enlarged gradually from the photodiode toward the gate electrode. With such a gradient, the elec-
10 tric signals are smoothly transferred along the potential gradient, without the electric signals stagnating in movement from the photodiode to the gate electrode. As a result, the electric signals can be transferred at high speed from the photodiode to the gate electrode.

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